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WHAT IS CLAIMED IS:

1. A plastic sheet product having a matte finish comprising a core layer of a first thermoplastic polymer and at least one layer of a capstock composition overlying and bonded to at least one face of the core layer, said capstock composition comprising a second thermoplastic polymer having a refractive index and containing a plurality of discrete particles immiscible with, and dispersed in, the second thermoplastic polymer and having a refractive index, wherein the refractive index of the particles differs from the refractive index of the second thermoplastic polymer.

2. The plastic sheet product of claim 1 wherein the first thermoplastic polymer and the second thermoplastic polymer are independently selected from the group consisting of polyethylenes, polypropylenes, ethylene-propylene copolymers, ethylene-vinyl acetate copolymers, ethylene-methyl acrylate copolymers, ethylene-ethyl acrylate copolymers, ethylene-methyl methylmethacrylate copolymers, ethylene-vinyl acetate-methyl methacrylate copolymers, polyvinyl chloride, acrylonitrile-styrene copolymers, polystyrenes, styrene-methylmethacrylate copolymers, polyethyl acrylates, polymethyl-methacrylates, methylmethacrylate-methylacrylate copolymers, polyethylene terephthalates, polyamides, polycarbonates, polyurethanes and silicone resins.

3 ~~2.~~ The plastic sheet product of claim 1 wherein the first thermoplastic polymer and the second thermoplastic polymer are transparent.

4 ~~3.~~ The plastic sheet product of claim 1 wherein the second thermoplastic polymer is the same as the first thermoplastic polymer.

5 ~~4.~~ The plastic product of claim 4 ~~3~~ wherein the second and the first thermoplastic polymer comprise a methyl methacrylate-methyl acrylate copolymer.

6 ~~5.~~ The plastic sheet product of claim 4 wherein the copolymer comprises about 80 to about 98 wt.% methyl methacrylate and about 2 to about 20 wt.% methyl acrylate.

7 ~~6.~~ The plastic sheet product of claim 5 wherein the copolymer comprises 93 to 97 wt.% methyl methacrylate and 3 to 7 wt.% methyl acrylate.

2 layers 8 ~~7.~~ The plastic sheet product of claim 1 wherein the capstock composition is bonded to only one face of the core layer.

3 layers 9 ~~8.~~ The plastic sheet product of claim 1 wherein the capstock composition is bonded to both faces of the core layer.

10 ~~9.~~ The plastic sheet product of claim 1 wherein the first and second thermoplastic polymers have weight average molecular weights in the range of about 100,000 to about 175,000.

11 ~~10.~~ The plastic sheet product of claim 9 wherein the first and second thermoplastic polymers have weight average molecular weights in the range of 125,000 to 150,000.

12 ~~11.~~ The plastic sheet product of claim 1 wherein the core layer has a thickness of about 2 to about 13 mm and said at least one capstock layer has a thickness of about 10 to about 400 microns.

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13 ~~12.~~ The plastic sheet product of claim 11 wherein the core layer has a thickness of 4 to 10 mm and said at least one capstock layer has a thickness of 150 to 300 microns.

14 ~~13.~~ The plastic sheet product of claim 1 wherein the particles have particle size diameters in the range of about 1 micron to about 60 microns.

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15 ~~14~~. The plastic sheet product of claim 13 wherein the particles have particle size diameters in the range of 30 to 50 microns.

16 ~~15~~. The plastic sheet product of claim 1 wherein the particles are dispersed in the second thermoplastic polymer in an amount of about 4 to about 30 wt.%.

17 ~~16~~. The plastic sheet product of claim 15 wherein the particles are dispersed in the second thermoplastic polymer in an amount of 22 to 26 wt.%.

18 ~~17~~. The plastic sheet product of claim 1 wherein the refractive indices of the particles and the second thermoplastic polymer are in the range of about 1.40 to about 1.65.

19 ~~18~~. The plastic sheet product of claim 17 wherein the refractive indices of the particles and the second thermoplastic polymer are in the range of 1.49 to 1.55.

20 ~~19~~. The plastic sheet product of claim 1 wherein the refractive index of the particles differs from the refractive index of the second thermoplastic polymer by a value in the range of about 0.001 to about 0.030.

21 ~~20~~. The plastic sheet product of claim 19 wherein the refractive index of the particles differs from the refractive index of the second thermoplastic polymer by a value in the range of 0.005 to 0.020.

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22 ~~21~~. The plastic sheet product of claim 1 wherein the particles are comprised of a polymer or a pigment.

23 ~~22~~. The plastic sheet product of claim 21 wherein the particles are comprised of a polymer selected from the group consisting of crosslinked polymethylmethacrylate, crosslinked polymethylmethacrylate modified with an acrylate or methacrylate monomer, crosslinked copolymers of methylmethacrylate and styrene, silicone resins and polyallyl methacrylates.

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24 ~~23~~. The plastic sheet product of claim 21 wherein the pigment is selected from the group consisting of barium sulfate, silicon dioxide, aluminum oxide, aluminum hydroxide and calcium carbonate.

25 ~~24~~. The plastic sheet product of Claim 1 wherein plastic sheet is formed by feedblock coextrusion of the core layer and the capstock composition.

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